

WHAT IS CLAIMED IS:

1. A method for preparing a copolymer of a first polymer which is a polyethersulfone, polyetherketone, or polyetherimide and a second condensation polymer characterized by structural units containing an oxycarbonyl group, which comprises contacting, under reactive conditions, at least one salt of a dihydroxyaromatic compound with at least one substituted aromatic compound of the formula



wherein Z is an activating radical,  $A^1$  is an aromatic radical and  $X^1$  is fluoro, chloro, bromo or nitro, in the presence of said second polymer.

2. The method according to claim 1 wherein the second polymer is present in the amount of about 2-50 mole percent of structural units therein based on substituted aromatic compound.

3. The method according to claim 2 wherein the molar ratio of said salt to said substituted aromatic compound is 0.98-1.02:1.

4. The method according to claim 3 wherein the molar ratio of said salt to said substituted aromatic compound is 1:1.

5. The method according to claim 2 wherein the contact temperature is in the range of about 125-300°C.

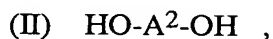
6. The method according to claim 1 wherein the second polymer is a polyarylate.

7. The method according to claim 6 wherein the polyarylate is a bisphenol A, resorcinol or hydroquinone iso/terephthalate.

8. The method according to claim 2 wherein the dihydroxyaromatic compound salt is a sodium or potassium salt.

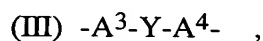
9. The method according to claim 2 wherein the second polymer is a polycarbonate.

10. The method according to claim 9 wherein the dihydroxyaromatic compound has the formula



wherein A<sup>2</sup> is a divalent aromatic hydrocarbon radical.

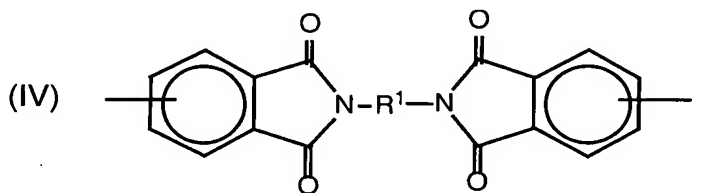
11. The method according to claim 10 wherein A<sup>2</sup> has the formula



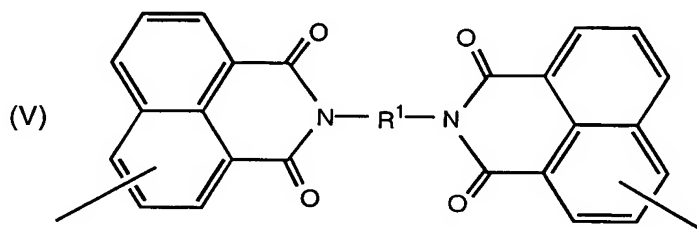
wherein each of A<sup>3</sup> and A<sup>4</sup> is a monocyclic divalent aromatic hydrocarbon radical and Y is a single bond or a bridging radical in which one or two atoms separate A<sup>3</sup> from A<sup>4</sup>.

12. The method according to claim 11 wherein Y is isopropylidene and A<sup>3</sup> and A<sup>4</sup> are each p-phenylene.

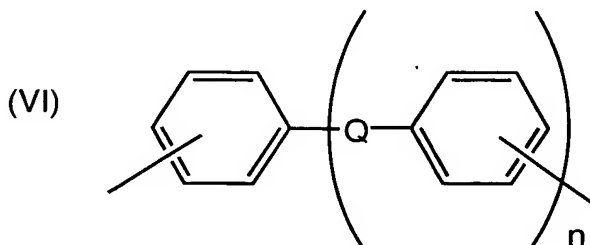
13. The method according to claim 9 wherein -A<sup>1</sup>-Z-A<sup>1</sup>- is a bisimide radical of the formula



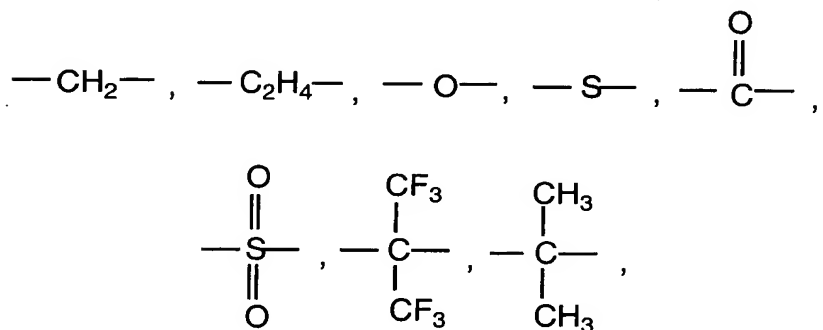
or



wherein  $R^1$  is a  $C_{6-30}$  divalent aromatic hydrocarbon or halogenated hydrocarbon radical, a  $C_{2-20}$  alkylene or cycloalkylene radical, a  $C_{2-8}$  bis(alkylene-terminated) polydiorganosiloxane radical or a divalent radical of the formula



5 in which  $n$  is an interger from 1 to 3 inclusive and  $Q$  is



or a covalent bond.

14. The method according to claim 2 wherein the substituted aromatic compound is a bis(haloaryl) ketone.

10 15. The method according to claim 2 wherein the substituted aromatic compound is a bis(haloaryl) sulfone.

16. The method according to claim 15 wherein the bis(haloaryl) sulfone is bis(4-chlorophenyl) sulfone.

17. The method according to claim 2 wherein a solvent is present.

15 18. The method according to claim 17 wherein the solvent is a dipolar aprotic solvent.

19. The method according to claim 17 wherein the solvent is a water-immiscible aromatic compound.

20. The method according to claim 19 wherein the solvent is o-dichlorobenzene or anisole or a mixture thereof.

21. The method according to claim 19 wherein a phase transfer catalyst is also present.

22. The method according to claim 21 wherein the phase transfer catalyst is a hexaalkylguanidinium halide.

23. The method according to claim 21 wherein the contact temperature is in the range of about 125-250°C.

24. A method for preparing a copolyethersulfonecarbonate which comprises contacting, under reactive conditions, at least one alkali metal salt of bisphenol A with bis(4-chlorophenyl) sulfone in solution in o-dichlorobenzene or anisole, in the presence of a polycarbonate and about 1-10 mole percent, based on said bis(4-chlorophenyl) sulfone, of a hexaalkylguanidinium halide as phase transfer catalyst and at a temperature in the range of about 125-250°C.

25. A method for preparing at least one hydroxy-terminated oligomer of a polyether polymer which comprises:

preparing a copolymer of a first polymer which is a polyethersulfone, polyetherketone, or polyetherimide and a second condensation polymer characterized by structural units containing an oxycarbonyl group, by contacting, under reactive conditions, at least one salt of a dihydroxyaromatic compound with at least one substituted aromatic compound of the formula



wherein Z is an activating radical, A<sup>1</sup> is an aromatic radical and X<sup>1</sup> is fluoro, chloro, bromo or nitro, in the presence of said second polymer; and

contacting said copolymer with aqueous alkali under reactive conditions, thus hydrolyzing carbonate and ester units.

26. The method according to claim 25 wherein the dihydroxyaromatic compound salt is a sodium or potassium salt.

5 27. The method according to claim 25 wherein the second polymer is a polyester.

28. The method according to claim 25 wherein the second polymer is a polycarbonate.

10 29. The method according to claim 28 wherein the polycarbonate is a bisphenol A polycarbonate.

30. The method according to claim 29 wherein the substituted aromatic compound is a bis(haloaryl) sulfone.

31. The method according to claim 25 wherein a water-immiscible aromatic compound is present as solvent.

15 32. The method according to claim 31 wherein the solvent is o-dichlorobenzene or anisole or a mixture thereof.

33. The method according to claim 31 wherein a phase transfer catalyst is also present.

20 34. The method according to claim 33 wherein the phase transfer catalyst is a hexaalkylguanidinium halide.

35. The method according to claim 33 wherein the contact temperature in the copolymer preparation step is in the range of about 125-250°C.

36. A method for preparing at least one hydroxy-terminated oligomer of a polyethersulfone which comprises:

preparing a copolymer of a polyethersulfone and a polycarbonate by contacting, under reactive conditions, at least one alkali metal salt of bisphenol A with bis(4-chlorophenyl) sulfone in the presence of said polycarbonate in solution in o-dichlorobenzene or anisole, further in the presence of about 1-10 mole percent, based on said bis(4-chlorophenyl) sulfone, of a hexaalkylguanidinium halide as phase transfer catalyst and at a temperature in the range of about 125-250°C; and

contacting said copolymer with aqueous sodium hydroxide or potassium hydroxide under reactive conditions, thus hydrolyzing carbonate units.